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**Jay Weinstein and Vijayan K. Pillai (2016) Demography – the Science of Population. Second edition. Rowman and Littlefield, Lanham MD and London. Pp. 420 + xxv11 includes Glossary, References and Index. PB $85 HB $110. Full colour e-text also available.**

Not another demography textbook, you may ask… This one is an update of the older text by the same authors and is written primarily for the North American college student market. It advertises itself as the most ‘applied’ book on the market using primarily US data for its case studies. The organisation is quite conventional – Part I *An Overview of Population Science*; Part II *Population dynamics*; Part III *Population Models*; and Part IV *Demography in Application*.

Chapter 1 on the nature of populations begins with some short summaries of major theories connecting human demography and animal populations and mentions some important differences between the study of individuals and the study of populations. It includes a brief review of structural approaches illustrated by the analyses of suicide by Durkheim before going on to the so-called ‘laws’ of population including some of the views of TR Malthus. On sources, there is scant mention of the impact event histories from surveys of different kinds have had on demography. Chapter 2 gets down to the brass tacks of population size and structure with a number of tables and graphs for countries and sub-divisions within countries including India, China and the US. Chapter 3 is mostly about age structure and is illustrated with a number of population pyramids for countries such as Afghanistan, Russia and the United States. There are examples on how to calculate mean ages and how to describe family types based on co-residence. In a discussion of differentials and inequalities, the reader is introduced to the Gini index. Chapter 4 deals with geographical distributions and the role that population density, central place theory and other aspects of urbanisation have on population dynamics.

In Part II of the book on population dynamics, the authors deal with the measurement of fertility without getting into very much technical detail. Some of the main theories about fertility change including those by Gary Becker, Richard Easterlin and Jack Caldwell and others are mentioned in summary form so that at least the reader knows the names if not the full background to these theories. Chapter 6 deals with mortality as well as mentioning morbidity rates including incidence rates for cancer. The importance of age standardisation is introduced and there is discussion of causes of death including the different patterns of illness and mortality among sub-populations in the US. Chapter 7 deals with migration including some basic definitions and discusses some of the broader theories of population movement including economic opportunities, Lee's theory of pull and push factors, the role of social networks and the Todaro migration model which seeks to explain why people continue to move into areas of high unemployment. Chapter 8 is more of a comparative study looking at the components of growth across the world including graphs of the European demographic transition and growth rates in a variety of low income populations. Chapter 8 concludes with an examination of the US population.

Part III deals with the models including the construction of abridged and unabridged life tables with a useful explanation of the meaning of each of the columns in the life-table. There is nothing on multiple decrement life tables or the more sophisticated use of life tables extending to survival analysis. Chapter 10 deals with population forecasts and presents different forms of population growth and introduces the standard cohort component method for population projection.

Part IV deals with demography in application and chapter 11 discusses ways in which different countries including India and China have attempted to control the course of population change. There is a discussion of family planning program effort measures and a short discussion on changing policies on international migration. Chapter 12 discusses the issue of population and environment, beginning with the assessment of carrying capacity and dealing with some of the more recent theories about the connections between population growth and environmental sustainability. The book anticipates the Sustainable Development Goals and spends some time reviewing the list of suggestions for indices. Chapter 13 provides a brief introduction to demographic software and programs that might be useful to people involved in demographic analysis. The book concludes in chapter 14 with more discussion of the role of demography as an applied science and has some illustrations or applications applied to tourism. In an Appendix, there are lists of useful web resources and there is a 10-page glossary followed by an extensive list of references, some of them classics and many quite old.

The strength of the book is its many tables and graphs which illustrate many features of demography in an accessible and clear way. The case studies, for example, the way in which the Zambia arrived at its population policy, are useful and well presented. There is very little advanced technical information in the book and certainly no new contributions to methods or theory within its covers. Its strong North American orientation makes it probably less suitable for European demography courses and certainly the high price of even the paperback edition will deter many European students from making a purchase. The central challenge for authors of textbooks like this is that there is so much information available on the Internet now that keeping up-to-date is a major challenge. There is so much free information available in this way that students generally prefer to go to recommended websites and read the materials online than pay for an expensive textbook that inevitably goes out of date rather quickly.

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